



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

March 13 order 2287

RBW6405G02131-3G-1

Job Sheet 169927



Part No: RBW6405G02131-3G-1

Job Qty: 2 ea

Part Name: Bolt



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/3/18

Job Tracking No:

Due Date: 1/26/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: DWG RBW6405G02131-3G REV D SHEET 2 IPP Rev.A 17.08.29 New issue DP Verify DD IPP Rev B 17.11.14 Rev B DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	2 Ea	1/11/18	1/11/18	0.00	0.00	Start Up Machining-3		SL 18-1-29
110	CNC Lathe	2 pcs	1/12/18	1/12/18	0.00	1.00	MORI SL-154		JK
120	QC	2 pcs	1/12/18	1/12/18	0.00	0.00	QC2 Machining-4		JK
130	QC	2 pcs	1/12/18	1/12/18	0.00	0.00	QC8 Machining-4		DA 8/10/30
140	QC	2 pcs	1/12/18	1/12/18	0.00	0.00	QC5		AT 8/10/30
180	Outsource	2 pcs	1/26/18	1/26/18			GRO002-VC Outsource 130		AT 8/10/30
190	Packaging	2 pcs	1/26/18	1/26/18	0.00	0.00	Packaging2		AT 8/10/30
200	QC	2 pcs	1/26/18	1/26/18	0.00	0.00	QC6		38
210	Packaging	2 pcs	1/26/18	1/26/18	0.00	0.00	Packaging3-1 GA		FEB 16 2018
220	QC21-SA	2 Ea	1/26/18	1/26/18	0.00	0.00	QC21		FEB 16 2018

Part Op 110 - 1-Machine as per DWG. FB623 FOLIO REV: _____ DWG REV: _____ 2-Debur
Descriptions: 180 - -Issue P/O to Groupe Altech: P/O 038918 -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required

JAN 31 2018

Job Allocations

Operation	Component Part	Required	Inventory	Allocated	Std Qty
90-Start up Operation	MT-4140QT-R0.750	1	0	0	0

S033398

108

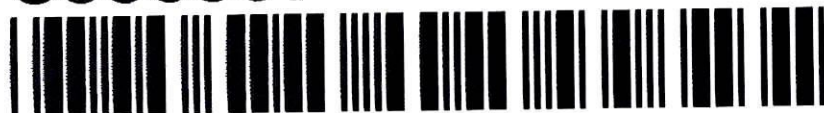
Part Specifications

Specifications could not be found.

Plex 1/3/18 1:39 PM Dart.lajeunesse.marie



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K64 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Bolt

PART NO: RBW6405G02131-3G-1

Original Serial #: S036387

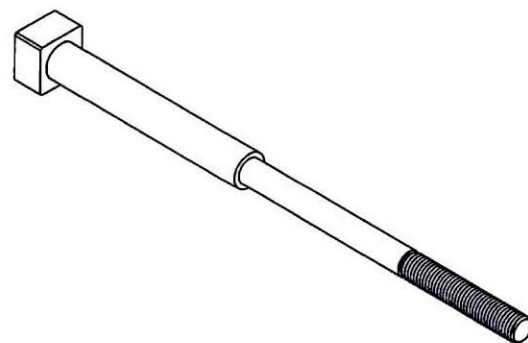
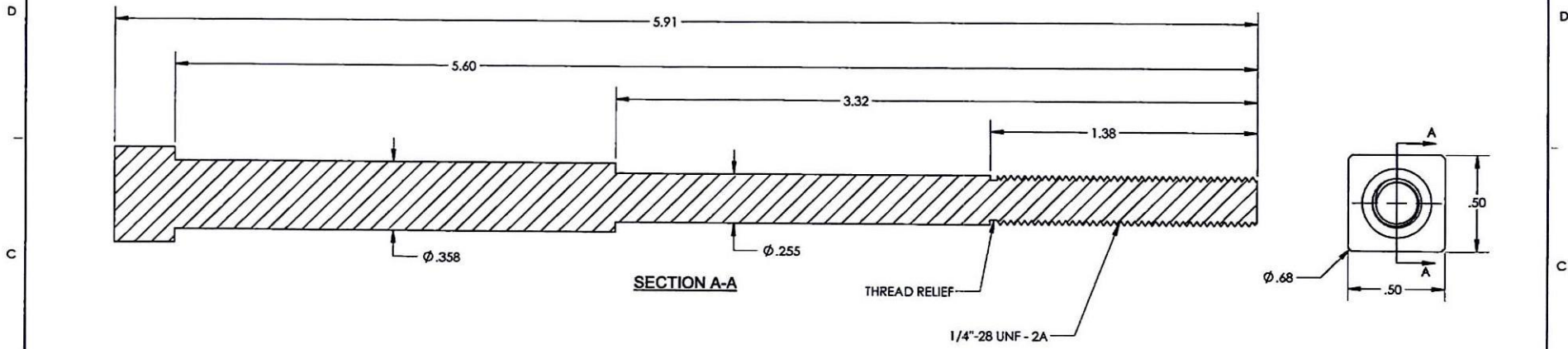
Revision:

Operation: Start up Operation 01/29/18

Change No:

Job No: 169927

8 7 6 5 4 3 2 1



RBW6405G02131-3G-1 BOLT

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 169927 ML5
18-01-03

- NOTES:
- 1) MATERIAL: AISI 4140/4142 Q & T
 - 2) HEAT TREAT: 28-34 Rc
 - 3) FINISH: ZINC PLATE
 - 4) SPEC: ASTM B833 TYPE I, SC 2
 - 5) BREAK ALL SHARP EDGES .015 x 45° OR .015R
 - 6) IDENTIFICATION: N/A

TITLE BOLT	
DWG NO. RBW6405G02131-3G-1	REV D
DESIGN BY: VM 10/10/2017 DRAWN BY: VM 10/30/2017 CHECKED: SAC 10/30/2017 MFG. APPR: DD 10/31/2017 APPROVED: VM 11/02/2017 DATE: 10/30/2017 SCALE: NTS	WEIGHT: 0.132 LBS SHEET 2 OF 4 1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED 2. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 3. DIMENSIONAL LIMITS APPLY AFTER PLATING 4. ANGLES ± 5° 5. SURFACES ± 12° 6. FRACTIONS 1/16 7. DECIMALS ± .01 8. UNLESS OTHERWISE SPECIFIED
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8 7 6 5 4 3 2 1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:12.5%;">Skid-tube ☐</td> <td style="width:12.5%;">Cross tube ☐</td> <td style="width:12.5%;">Water Jet ☐</td> <td style="width:12.5%;">Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																					
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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																						
Description Work Order Deviation				Disposition																																																									
Root Cause <table style="width:100%; border: none;"> <tr><td style="width:50%;">Environment ☐</td><td style="width:50%;">No Re-verification ☐</td></tr> <tr><td>Design ☐</td><td>Operator ☐</td></tr> <tr><td>Doc/Data ☐</td><td>Offset/Setup ☐</td></tr> <tr><td>Equip/Tooling ☐</td><td>Supplier ☐</td></tr> <tr><td>Handling/Pre ☐</td><td>Training ☐</td></tr> <tr><td>Material ☐</td><td>Use for Testing ☐</td></tr> <tr><td>Internal Transport ☐</td><td>Poor Information ☐</td></tr> <tr><td>Tribal Knowledge ☐</td><td>Rushing ☐</td></tr> <tr><td>LOA ☐</td><td>Product Improvement ☐</td></tr> <tr><td>Substation ☐</td><td>Process Improvement ☐</td></tr> <tr><td>Past Expiry Date ☐</td><td>Manufacturing Process ☐</td></tr> <tr><td>Misidentified ☐</td><td>Past Due ☐</td></tr> </table>		Environment ☐	No Re-verification ☐	Design ☐	Operator ☐	Doc/Data ☐	Offset/Setup ☐	Equip/Tooling ☐	Supplier ☐	Handling/Pre ☐	Training ☐	Material ☐	Use for Testing ☐	Internal Transport ☐	Poor Information ☐	Tribal Knowledge ☐	Rushing ☐	LOA ☐	Product Improvement ☐	Substation ☐	Process Improvement ☐	Past Expiry Date ☐	Manufacturing Process ☐	Misidentified ☐	Past Due ☐	FAULT CATEGORY <table style="width:100%; border: none;"> <tr> <td style="width:33%;">Pressure/Forced ☐</td> <td style="width:33%;">Temperature/Cure ☐</td> <td style="width:33%;">Power Loss/Surge ☐</td> </tr> <tr> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> </tr> <tr> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> </tr> <tr> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> </tr> <tr> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> </tr> <tr> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> </tr> <tr> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> </tr> <tr> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> </tr> <tr> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> </tr> <tr> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> </tr> </table>						Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Crushing ☐	Countersink ☐	Off-set ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐
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DART AEROSPACE LTD		Work Order:	171015 16998
Description: Bolt		Part Number:	RBW6405GC02131-3G-1
Inspection Dwg: RBW6405GC02131-3G-1		Rev: D	Page 1 of 1

[illegible]

Engineering Approval: (If necessary)		Date:	
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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO038918

Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

PO No: PO038918
PO Date: 1/31/18
Due Date: 2/8/18
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Baker, Diane
Phone: dbaker@dartaero.com

E-MAILED
FEB 12 2018

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Items										
Line Item	Job	Part	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	169927	RBW6405G02131-3G-1	Bolt -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 - Certificate of Conformity is required	Firmed	2/8/18	2 pcs ✓	0 pcs 2x	2 pcs	\$3.00/pcs At 18/02/14	\$6.00
2	170013	RB6796941-14	Starter Seal Guide -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	2/8/18	5 pcs ✓	0 pcs 5x	5 pcs	\$2.49/pcs At 18/02/14	\$12.45
3	170165	647.7701	Strut Assembly Issue P/O : _____ Group Altech CAD PLATE IAW QQ-P-416F CLASS I TYPE II note: cad plate should not be too thick around tread	Firmed	2/8/18	10 pcs ✓	0 pcs 10x	10 pcs	\$6.00/pcs At 18/02/14	\$60.00
4	170255	RBT18560-11	Upright -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	2/8/18	12 pcs ✓	0 pcs 12x	12 pcs	\$3.50/pcs At 18/02/14	\$42.00
5	170360	RBW109-3101-58-1-3	Hammer Head -Issue P/O to Groupe Altech: P/O _____ -Zinc plate, ASTM B633 TYPE 1 SC2 -Certificate of Conformity is required	Firmed	2/8/18	6 pcs ✓	0 pcs 6x	6 pcs	\$2.39/pcs At 18/02/14	\$14.34
6	170485	647.7703	Strut Assembly Issue	Firmed	2/8/18	16 pcs ✓	0 pcs 16x	16 pcs	\$75.50/pcs At 18/02/14	\$1,208.00

DAS
38
9-89



Certificat de Conformité / Certificate of Compliance

(006394-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

006394 - 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
14-Feb-2018		Curtis Anderson		038918				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	RBW6405G02131-3G-1 Rev.	BOLT 01 -ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT] SPÉC: ASTM B633 TYPE 1 SC2 ***	ZINC CH	2	2	0	0	0
2	RB6796941-14 Rev.	PLUG BLACK OXIDE MIL-C-13924C CLASS 1	BLACK-OXIDE CH	5	5	0	0	0
3	647.7701 Rev.	647.7701 CAD PLATE IAW QQ-P-416F CLASS 1 TYPE 2 CAD PLATE SHOULD NOT BE TO THICK AROUND TREAD	CADMIUM CH	10	10	0	0	0
4	RBT18560-11 Rev.	RBT18560-11 BLACK OXIDE FINISH MIL-C-13924C CLASS 1	OXIDE-BLACK CH	12	12	0	0	0
5	RBW109-3101-58-1-3 Rev.	RBW109-3101-58-1-3 01 -ZINC [ZINC] SPÉC: ASTM B633 TYPE 1, SC2 *** SPÉC: CONFORMITY IS REQ. ***	ZINC CH	6	6	0	0	0
6	647-7703 Rev.	647-7703 CAD PLATE IAW QQ-P-416F CLASS 1 TYPE II	CADMIUM CH	16	16	0	0	0
7	RBW109-3101-58-1-3 Rev.	RBW109-3101-58-1-3 01 -ZINC [ZINC] SPÉC: ASTM B633 TYPE 1, SC2 *** SPÉC: CONFORMITY IS REQ. ***	ZINC CH	6	6	0	0	0
8	RBW6405G02131-3G-1 Rev.	BOLT 01 -ZINC-CLEAR TRI [ZINC CLEAR TRIVALENT] SPÉC: ASTM B633 TYPE 1 SC2 ***	ZINC CH	2	2	0	0	0

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.